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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,946	01/16/2004	Richard A. Marando	1-23664	6175

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MACMILLAN, SOBANSKI & TODD, LLC
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EXAMINER

AFZALI, SARANG

ART UNIT	PAPER NUMBER
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3726

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary

Application No.

10/758,946

Applicant(s)

MARANDO ET AL.

Examiner

Sarang Afzali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed 2/8/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) 25,26,30,35,36 and 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-24,27-29,31-34 and 37-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The applicant's amendment filed on 2/8/2007 has been fully considered and made of record.
2. Newly submitted claims 25, 26, 30, 35, 36, and 40 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Claims 4, 10, 14, and 20, as amended on 8/8/2006, were withdrawn in the office action mailed on 11/03/2006 because of the Applicant's election without traverse of Species A, per restriction requirement mailed on 8/1/2006. The Applicant has cancelled claims 1-20 in the amendment filed on 2/8/2007, however the newly added claims 25, 26, 30, 35, 36, and 40 are incorporating the same limitations of previously presented claims 4, 10, 14, and 20.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 25, 26, 30, 35, 36, and 40 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 21-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21, recites the limitation of "securing a plurality of second structural members to the node and to the first structural member to form a vehicular frame assembly". It is not clear how each of second members can be secured to both the node and to the first structural member at the same time. Is a second member going to be secured at one end to the node and at another end to the first member or it is only secured to the first member by means of connection to the node which is connected to the first member.

Claim 31, recites the limitation of "securing plurality of second structural members to the plurality of first structural members to form a vehicular frame assembly". It is not clear how each of second structural members can be secured to each of first structural members. Is a second structural member going to be secured to the first structural member at the node securing portion of the insert which is already secured to the first structural member or the second structural member is being secured at the free end of the first structural member.

Applicant needs to clearly define how would the first and second members and the inserts are all being secured to each other.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 21-24, 28, 31-34, and 38, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Mariman et al. (US 6,672,627).

As applied to claim 21, Mariman et al. teach a method of manufacturing a node for joining a plurality of structural members together to form a vehicular body and frame assembly comprising the steps of:

(a) providing an insert (steel sleeve 56, Fig. 3) having a node securing portion (knurled portion 62 of steel sleeve 56, Fig. 3) and a mounting portion (opposite end to the knurled portion of steel sleeve 56, Fig. 3);

(b) casting a node (aluminum coupler 50 including frame 52, Fig. 4, col. 3, lines 1-6) about the node securing portion of the insert;

(c) securing a first structural member (first air line 32 on the top, Fig. 2) to the mounting portion of the insert; and

(d) securing a plurality of second structural members (vertical standard 40 and plurality of air lines 34, Figs. 1 & 2) to the node (coupler 52, Fig. 2) which is secured to the first structural member to form a vehicular frame assembly.

Note that the air seeder (10, Fig. 1) comprises a seed cart (12) and a tilling implement (14) and by coupling airlines (32) to airlines (34) a complete air seeder (10) including vehicular body and frame assembly is formed.

As applied to claim 22, Mariman et al. teach that first material is steel and the second material is aluminum, which is used in casting the node.

As applied to claims 23 and 24, Mariman et al. teach that step (a) is performed by providing the insert with a node securing portion having a plurality of apertures formed therethrough (knurled portion 62, Fig. 3); and wherein step (b) is performed by casting a portion of the node within the plurality of apertures.

Note that the knurled portion of the insert includes peaks and valleys and by definition (see attached Compact Oxford Dictionary) the valleys between peaks of the knurled portion are considered gaps and apertures and the peaks are considered protrusions.

As applied to claim 28, Mariman et al. teach that step (b) of casting a node (coupler 52 including frame 50, Fig. 2) is performed prior to step (c) of securing the first structural member (32, Fig. 2) to the mounting portion of the insert (56, Fig. 1).

As applied to claim 31, Mariman et al. teach a method comprising the steps of:

(a) providing a plurality of inserts (plurality of steel sleeves 56, Fig. 3), each having a node securing portion (knurled portion 62 of steel sleeve 56, Fig. 3) and a mounting portion (opposite end to knurled portion of steel sleeve 56, Fig. 3);

(b) casting a node (aluminum coupler 50 including frame 52, Fig. 4, col. 3, lines 1-6) about the node securing portion of each of the plurality of the inserts;

(c) securing a first structural member (first air line 32 on the top, Fig. 2) to the mounting portion of each of the insert; and

(d) securing a plurality of second structural members (vertical standard 40 and plurality of air lines 34, Figs. 1 & 2) to the plurality of the first structural members by means of the formed node (coupler 52, Fig. 2) to form a vehicular frame assembly.

Note that the air seeder (10, Fig. 1) comprises a seed cart (12) and a tilling implement (14) and by coupling airlines (32) to airlines (34) a complete air seeder (10) including vehicular body and frame assembly is formed.

As applied to claim 32, Mariman et al. teach that each of the inserts (62) is made of the first material (steel) and the second material is aluminum, which is used in casting the node.

As applied to claims 33 and 34, Mariman et al. teach that step (a) is performed by providing each of the inserts with a node securing portion having a plurality of apertures formed therethrough (knurled portion 62, Fig. 3); and wherein step (b) is performed by casting a portion of the node within the plurality of apertures.

Note that the knurled portion of the insert includes peaks and valleys and by definition (see attached Compact Oxford Dictionary) the valleys between peaks of the

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knurled portion are considered gaps and apertures and the peaks are considered protrusions.

As applied to claim 38, Mariman et al. teach that step (b) of casting a node (coupler 52 including frame 50, Fig. 2) is performed prior to step (c) of securing the first structural member (32, Fig. 2) to the mounting portion of each of the plurality of inserts (56, Fig. 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 27 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mariman et al. Mariman et al. teach the claimed invention with the exception of explicitly disclosing that initial movement of the first structural member both in lateral direction and in a rotational direction relative to the insert. However, it is known that when coupling two members that requires seating of one member into the other, it is necessary to jiggle and move at least one member in both lateral and rotational directions in order to have a proper seating and effective coupling of the two members to each other. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have jiggled and moved a member of Mariman et al. in both lateral and rotational direction to provide an effective coupling of the joined members.

9. Claims 29 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mariman et al. Mariman et al. teach the claimed invention including the step (b) of casting a node (coupler 52 including frame 50, Fig. 2) is performed prior to step (c) of securing the first structural member (32, Fig. 2) to the mounting portion of each of the plurality of inserts (56, Fig. 1). However, Mariman et al. do not teach that step (c) is performed prior to step (b). However, it would have been obvious to one of ordinary skill in the art at the time of invention to have reversed the steps of (b) and (c) and secured a first structural member to the mounting portion of each insert prior to casting a node about the node securing portion of the insert in order to pre-assemble the members to each other, resulting in fewer steps during final assembly.

Furthermore, it has been held that selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results. See *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946).

Response to Arguments

10. Applicant's arguments filed 2/8/2007 have been fully considered but they are not persuasive.

Under "Remarks", page 1, with respect to Mariman et al. reference, Applicant argues that "The Mariman et al. reference is non-analogous art to the claimed invention and, therefore, should not be considered at all when evaluating the patentability of the claimed invention." The Applicant is reminded that Mariman et al. is used in a 102 (e)-type rejection and as such, the "non-analogous" argument is not valid and it would only

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be appropriate for a reference used in a 103 (a)-type rejection, in which two or more references were combined.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarang Afzali whose telephone number is 571-272-8412. The examiner can normally be reached on 7:00-3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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4/9/2007



DAVID P. BRYANT
SUPERVISORY PATENT EXAMINER

4/16/07